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The Evolution of Bronze sculptures in the Chola Period: A Case Study of the Bronze Images of Kali from the Government Museum, Chennai

Sanjay S

Introduction: The tradition of making metal images in the Indian Subcontinent can be traced back to the enigmatic Indus Valley Civilization. The small 10cm copper image of a dancing girl from Harappa gives an excellent example of elegance in posture and sophistication in casting, which was known to her maker almost 4000 years ago in *ca.* 2000 BCE[1]. In Tamil Nādu and particularly in iron-age sites like Adichanallur, examples of metalworking for art can also be seen. A 17cm copper female figurine popularly believed to portray a 'Mother Goddess' and dated to somewhere between 1000 to 800 BCE shows that the smelting technique in image casting was known to the people, as arsenic was added along with copper to make the image sturdier[2]. Among the most spectacular works of Indian sculptural art are the temple bronzes that were produced during the rule of the Chola dynasty. The Tamil-speaking regions under them for the most part enjoyed a period of political stability and economic prosperity culminating in the achievement of artistic endeavors which is most evident in the bronze sculptures that were perfected during this time and continue to be made even today.

Purpose of the paper: The bronze icons of the Cholas have been studied by art historians from the 19th century onwards, and many scholars have proposed various methods of dating and classifications based solely on style and attributes. This study intends to put to test these contentious and sometimes criticized to be subjective classifications by comparing seven bronze images of the goddess *Kālī* that are currently on display in the Government Museum, Chennai. This is done so, as Harold Osborne put it "Sculptures which are variations on a similar compositional theme can teach us a great deal about the art of sculpture. To compare half a dozen 'Indian Bronzes' which are identical in pose and to see how even within the severe limitations of iconography and iconometry it is possible for one sculptor to achieve such different visual effects from another, or to compare two entirely different variations on the same theme. " [3]. The premier position occupied by the Madras Museum in this field as it was started in 1851, enabled it to gather a particularly fine collection of South Indian metal images, mostly Hindu and mostly acquired by the government from treasure trove finds[4].

Limitations: Though there are many Chola bronze icons of goddess *Kālī* scattered throughout the temples of Tamil Nādu which would have contributed much valuable information for a stylistic analysis, the lack of proper photographs of them has unfortunately made those idols

unapproachable for the present study. The bronze Chola icons of the goddess *Kālī* from other museums have also not been considered to limit the number of sculptures from the same time frame to dominate the study.

The Cholas- Skilled Warriors and Connoisseurs of Art: The Cholas as a dynastic power were said to date back to the Sangam period (3rd century BCE to 3rd century CE) where the mentions of a king by the name of Karikala Chola is found in contemporary literature, but barring that, the dynasty seems to have disappeared due to unforeseen reasons and are not to be heard of again until the 9th century CE[5]. The period considered to be the reign of the Second Chola dynasty is said to have lasted for about 450 years and having no less than 20 kings, who bore the dynastic name 'Chola' as evidenced till their last inscription dateable to 1279 CE[6]. In their heyday, the Cholas formed an extensive empire in South India stretching from Ceylon and Maldives in the south to Tungabhadra in the north[7]. The Cholas, also famous for their international character maintained regular contacts with Java, and sent diplomatic missions to modern-day Myanmar, Malaysia, and China to enhance trade[8]. Such an extensive empire came to be known as *Cholamandala* or 'the realm of the Cholas' which then became anglicized to form the word coromandel[9]. These rulers as enlightened patrons of the arts commissioned elegant sculptures and dedicated majestic temples to Hindu deities in order to proclaim their power, wealth, and piety[10]. Scholars attribute this excessive spending towards temples and religious institutions even from the initial phases of Chola rule to two possible reasons. One, the *Bhakthi* movement, a pervasive influence of devotional creeds that were preached by the *Saiva Nayanmars* and *Vaishnava Alvars*, whose poems developed a procedure of temple worship[11] and two, the rulers and the administrators under them drew upon the power of artistic patronage in order to legitimize their dynastic power and to increase their reputation in the eyes of the common masses. The act of giving any gift which was in the nature of an endowment or the offering of a metal image or jewellery, guaranteed the donor a share in the honors accorded by the temple, which in turn was translated into prestige and social status[12].

For the purpose of studying their vast presence in the southern part of the Indian subcontinent and beyond, the history of the dynasty is divided into three segments; Early Cholas from *ca.* 850 to 985 CE, Imperial Cholas from 985 to 1070 CE and later Cholas from ca. 1070 to 1279 CE[13]. In keeping with the theme of this study regarding *Kālī* as a Goddess propitiated for war and the artistic splendor of the Chola bronzes, the warring nature of the Cholas and the individual patronage of the kings in the field of arts will be given more emphasis in the view of their general history. As will be seen in the next few pages the need for warfare and the immense growth of the arts went hand in hand, both being ultimately done for the survival of the dynasty itself.

The Cholas before their hegemony of the Tamil-speaking regions survived initially by making alliances of convenience with the contemporary powers like the Pallavas and the Pandyas[14]. In *ca.* 850 CE Vijayala Chola (*ca.* 850-866 or 871 CE) who was then under the overlordship of the Pallavas captured their future capital city of Thanjavur from another

feudatory clan called the Muttaraiyars who had switched allegiances to the Pandyas after initially serving under the Pallavas[15]. Aditya I (*ca.* 871- 907 CE) who succeeded Vijayalaya Chola, turned against the Pallavas themselves defeating their army and capturing all of *Tondai-nādu* along with the *Kongu-nādu* region of the Cheras as Chola territory. He is also credited with the invasion and capture of Talakkad, the capital of the western Gangas[16]. His major contribution to the arts is the fact that he, Rajakesari Aditya I 'the *Indra* among Kings' built or renovated several Siva temples on either side of the Kaveri River[17]. Parantaka I (907 to 955 CE) after dealing a crushing blow to the Pandyan and Sri Lankan alliance against him, earning the surname Simhalantaka and Vira Chola, returned home with an immense war booty, sufficient enough to cover the roof of the Natajara Temple at Chidambaram with gold-plated tiles (Thomas, 2018). It was from this period as gleaned from inscriptions that the kings came to be seen as a reflection of Siva or Vishnu on earth[18]. The wife of the short-lived ruler Gandaraditya (956-957 CE), was the young and widowed Sembiyan Mahadevi. Known for her devout benefactions that extended over a period of six decades (941 to 1001 CE), her vivid inscriptions record the building or rebuilding of nine brick temples with stone and making numerous gifts to various other temples in the form of donating bronze *utsavamurtis* along with lavish jewellery to adorn those processional images[19]. All of these pious contributions rightly earned her a place in the annals of Chola history.

Three and a half decades until the ascension of Arumolivarman or Rajaraja I saw a period of confusion owing to the rule of six insignificant kings with overlapping regnal years. After much political intrigue leading to the assassination of his brother, Rajaraja I (985- 1014 CE) inherited a now weakened empire. However, with his successful military conquests against the Chalukyas, Rashtrakutas, Cheras, and the Pandyas, he expanded the boundaries of his kingdom to never before conquered territories. He also used his robust army to conquer regions of Sri Lanka, establishing a new Chola province in the island with the capital at Pollonaruva; resulting in the spread of Chola influence not only in administrative affairs but also in the sphere of art and especially in the making of bronzes[20]. Rajaraja I along with his entire entourage of eleven wives, relatives and members of the court, boasts in his inscriptions of donating 60 bronze images along with 502 kgs of gold and jewellery obtained as spoils of war to the Brihadisvara temple, his grand creation in the capital city of Thanjavur[21]. He also makes several permanent endowments to enable the temple to function in a grand manner.

Rajendra I (1012 to 1044) his son and successor, earned his title of *Gangaikondachola* by leading a military campaign against the Pala kingdom, depriving them of their elephants and treasures, impoverishing them into collapse[22]. He also directed his naval fleet to Srivijaya and Kadara, showcasing his might in the territories of modern-day Southeast Asia[23]. It was also during his time and from the time of his successors that the wars with the Chalukyas and the Pandyas had become a routine affair. With the rule of Adhirajendra (1069 to 1070 CE) the grandson of Rajendra I on the Chola throne, the Vijayalaya line came to an end[24].

From the beginning of their empire the Chola rulers were polygamous, forming political alliances by marrying into the families of defeated rulers[25]. In this manner another grandson of Rajendra I, the Chalukyan Rajendra II who had Chola roots from the matrilineal side ascended the Chola throne as Kulottunga I (1070 to 1125 CE), giving rise to the line of Chalukya-Cholas[26]. He is credited by Nilakanta Sastri with "avoiding unnecessary wars" and choosing instead to consolidate his possessions south of the Tungabhadra to ensure peace and stability in his kingdom[27]. This indirectly had an impact on later Chola monuments which were built modestly in size compared to previous Chola endeavours due to the reduction in treasures procured from tributes and warfare. Despite this, the emperor is known to have given his personal touch in the field of arts, where inscriptions of this period record the immediate involvement of himself or his higher officers in temple-related matters[28]. Regardless of the political turmoil that the Chola empire faced in the 11th and 12th centuries, their bronze casting skill seems to be highly praised in the 'Genzia documents', letters that were written by Jewish traders who lived in the Aden and the Coromandel ports[29].

Seven rulers of the Chalukya-Chola line ruled an ever-shrinking empire from 1122 to 1279 CE. In a twist of irony, Rajendra III who was the last of the Chola rulers ascended the throne in 1246 CE and ruled an area similar to what Vijayala Chola originally had under his control[30]. The losses suffered by the Cholas from the hands of their traditional enemies the Pandyas, enabled their feudatories like the Kakatiyas and Sambuvarayas to assert their independence. In the end, the Chola territories were easily absorbed into the Pandyan domain and the once glorious dynasty came to an end[31]. Even then for the next hundred years, the Chola school of art flourished under the new rulers, showcasing the complete domination that the art had on the people of Southern India.

Reasons for the Creation and Consecration of Bronze Images: In the 11th century, Chola temples started to integrate shrines for female divinities and subsidiary deities or *Parivāradevatā* with the main shrines inside the temple premises. There was also a marked increase of *Āgamic* rites or *Pūjās* several times a day that involved taking the deity for a procession around the temple complex[32] and Saiva *Āgamas* prescribed the procession of nine images during daily festivals[33]. As stone sculptures were heavy and stationary in nature, the production of smaller and lighter images was needed and thus bronze sculptures came to be used for these elaborate temple rituals[34]. Though the production of bronze images for temple use could be seen from the days of the later Pallava rulers of the 8th century CE, bronze sculptures as a specialised art become prominent only under the patronage of the Chola monarchs. These movable icons further helped to spread and consolidate the dominant religion among the masses[35]. Another indirect effect in the society was that when these deities went in procession, they became accessible even to the lowliest of worshippers who in the past were prohibited entry into the sacred premises of a temple[36].

The Bronze Sculptors and Sculptures in the Chola Period: The metal worker or the *Kamara* was an artisan of great importance in ancient India whose mention can be found from the Vedic period itself as he is known to have 'assumed the form of the Lord himself' as portrayed in the Yajurveda[37]. The Itihasas and Purāṇas gave descriptions of great honour to architects, carpenters and smiths calling them *Visvakarma* or architects of the universe[38]. From the early medieval period, the makers of the icons of deities in stone and metal were a hereditary clan of sculptors known as *sthapathis*, who learned the craft from their predecessors and passed on the information to others of the same community over the course of their lifetimes[39]. It is interesting to note that neither Sembiyan Mahadevi nor Rajaraja I, who both contributed to the growth of the art of bronze sculptures in the Chola period, made any mention of the *sthapathis* in their inscriptions, while never failing to mention meticulous pious donations made to the temple by royal personages[40].

The art of casting bronze images was traditionally called 'madhūcchiṣṭa vidhāna', which translates to the 'lost wax' or 'cire perdue' technique[41]. The method of casting such images is elaborately dealt with in various *silpāśastras* or treatises on sculptures like the Manasara and Mansollasa, generally considered to have been compiled between the 8th and 12th century CE[42]. They provide rules for both the iconography and iconometry for the images in the form of hymns called '*dhyana ślokas'* and the *sthapathis* work the image according to the instructions given in this hymn[43]. The *sthapathis* generally use a formula of 'idealized naturalism' as guidelines to show their skill and workmanship and to create remarkable pieces of high quality[44]. For example, the female torso in sculptures was imagined to be slender and long like the face of a horse, with the hand being smooth and round like that of a bamboo stem etc.[45]. Different attributes, weapons and postures that were special for each divinity are also present in the numerous *silpāśastras* for the image to be worthy of worship, while the image itself was made according to the *navatala* measure i.e., the length of the image was nine times the length of the palm or the face of the *sthapathi* or the donor[46].

Sivaram, briefly summarising the process of making bronze sculptures in the Chola period says "In the 'lost wax' technique, an actual size model of the icon is made in wax and wrapped in soft clay while being held in position by metal wires. A small hole is made at the base of the clay to facilitate the flow of the wax once it is heated. The 'lost wax' then proceeds to naturally leave a hollow of its shape in the clay and the required metals in a liquid form are poured inside. Once the metals cool and set, the surrounding clay is removed and the finer details of the sculpture are chiselled" [47]. The epigraphs of the Cholas refer to these metal images as '*śeppu thirumeni*' or copper images but from later periods it is believed that the idols of deities came to be made using copper, silver, gold, brass and zinc which collectively came to be known as *pañcaloha*. To test the metal consistency of the images belonging to the Chola period, the Government Museum laboratory in Chennai, conducted an analysis to find out that it was copper that was used in larger proportions, while the other metals were comparatively smaller in quantity[48]. It is also believed that no more than 100mg of gold and silver were added to these images, just for mere '*sastra*' or ritual, as

indicated by the modern-day *sthapathis* living in Swamimalai near Kumbakonam in Thanjavur district, Tamil Nādu[49]. As to where the Cholas obtained the necessary metals, slag and archaeometallurgical investigations suggest the possible sources to be from Andhra Pradesh and Karnataka regions along with areas including Mamandur in Tamil Nadu and Somalaragada in Nellore district, which were the closest to the Chola and Tamil dominions[50].

Goddess Kālī and her Significance during the Chola Period: Among the religions of the world, Hinduism is known for its fervent goddess worship. Goddess *Kālī* is said to have gotten her name due to her complexion being '*Kāla*' or black[51]. In the early literature, she is associated with another ferocious demoness named *Nirṭṭi* as both were having a black complexion but in the post-Vedic period, *Kālī* seems to have gained more prominence than her[52]. In *Purānic* literature, *Kālī* is one among the manifestations or forms of *Devī* or *Parāśakti* 'the ultimate goddess' who was formed by the union of all the energies of the gods combined. In the Mārkaṇḍeya Purāṇa she is associated with killing the demons *Śumbha-Niśumba* and in the Devī Bhāgavata Purāṇa she slays the demon *Raktabīja*, all of which helped her to showcase an image as a goddess of war who incarnates herself on earth to destroy demons disturbing the peace of all living things[53]. The Devī Māhātmya section of the Mārkaṇḍeya Purāṇa depicts her as being clad in tiger skin and having an emaciated body with an exceedingly wide mouth, lolling tongue, and deep sunk reddish eyes while brandishing the *khaḍga*, *pāśa*, and a *khaṭvāṇga*[54]. In the medieval period, goddess *Kālī* came to dominate Tantric iconography, texts, and rituals, where she evolves from a mere personification of wrath to the one through whom mankind achieves success and salvation[55].

In the regions of Tamil Nādu from the very beginning, when compared to north Indian religious works where goddesses were abstract philosophical concepts, Sangam literature portrayed female deities as powerful manifestations involved in the people's daily life[56]. The vivid description of the female goddess *kottravai* and the rituals connected with her worship in the *silappatikaram* dated to the 3rd century CE shows the evolution of her cult in Tamil Nādu[57]. As a village Goddess she was called on to solve day-to-day problems such as curing illnesses while relishing the food villagers offer, meat and toddy[58].

Kālī was a very important deity for the Cholas. The first act of Vijayalaya Chola after his capture of Thanjavur was the installation of the stone image of *Nisūmbhasudani*, whose mention is also found centuries later in the *thiruvālangādu* copper plates of Rajendra Chola I, which states that Vijayala had ruled his country by her grace[59]. By this time the goddesses *Kottravai* had been amalgamated into the concept of *Kālī* by the influence of Brahmanism. All Chola emperors had spiritual and royal gurus called *Rājagurus* who originally came from either southern Gujarat or Bengal[60]. As the popular Brahmanical literature of the time encouraged the propitiation of this deity for victories in battle, she is seen to have become the patron deity to the war-mongering Cholas. This factor in turn encouraged the feudatories under them to install the images of *Kālī* in their village foundations[61]. The expedition of Rajendra Chola into the Pala kingdom of present-day Bengal and Orissa is said to have also led to the relocation of a group of Saiva Brahmins from

Varanasi to the south. Even the Chalukya Cholas under Kulottunga I were influenced by the Tantric practices that were followed in Kalinga during his campaigns in the region[62]. In fact, the war poem kalingattupparani which deals with the victory of Kulottunga I over Kalinga extolls the worship of *Durgā-Kālī*[63]. Even today *Kālī* as *Amman* or 'mother' is passionately worshipped by the peasant matrilineal societies living in Southern India. In the Chola bronze sculptures, goddess *Kālī* is a part of Siva's entourage while carrying many Shaivite emblems except the antelope.

Classification of Chola Bronzes using Stylistic Analysis: It is commonly believed that the Chola bronze images were produced between the years 850 to 1250 CE[64]. In reality, it is very difficult to date individual Chola bronze sculptures because of the lack of any inscriptions on them, barring a very few specimens and the location where the image is found can also not be used as a factor for dating as these bronze images could be transported. Therefore, the dating and classification of these bronzes were made on the basis of typology with the help of facial features, contours of the figures, costumes, ornaments and attributes[65].

Academics who have made a meticulous visual study of the bronze sculptures have grouped them under various categories, building their ideas on the previous works. Sivaramamurti first broadly divided the Chola period art into Early Chola 850-1100 CE and later Chola 1100-1350 CE. Further, he enumerates the characteristics of early Chola art as having images with a formal pose, a high degree of dignity and a graceful figure with a round face. He then continues by saying that later Chola sculptures were delineated with a more conventional pose, a very prominent nose and a torso strongly moulded in the front[66]. One must make note of the fact that Sivaramamurti made the above classification by comparing both the stone and bronze figures from the Chola period. Nagaswamy subdivides the early Chola bronze art into the Aditya School, the Sembiyam Mahadevi school and the Rajaraja school "under the three great Chola personages intimately associated with it" [67]. He credits the Aditya bronzes as being marked by delicate workmanship and the Sembiyan bronzes as having a 'clarity' in workmanship, especially in the modelling and rendering of flexions in the body, all of which is delineated by detailed ornamentation. The Rajaraja school is also given an equally subjective classification when he says that the bronzes of this period have a certain dignity and authority not previously seen in the Sembiyan school[68]. Adding to this he also suggests a transitional phase within later Chola art, belonging to the images dated between Kulottunga I (*ca.* 1100) and those of Kulottunga III (*ca.* 1200)[69]. Thomas attempting to make a stylistic comparison between two groups of Chola bronzes dated to be from the 10th and 12th century unearthed from Tiruvengadu comes to the following conclusion: the former group has an oval face, smooth chin, thin lips and a lithe torso, while the latter group has a round face, narrow forehead, double chin along with prominent lips and short necks making their heads look disproportionately larger[70].

Bronze Idols of Goddess Kālī in the Government Museum, Chennai: This image of goddess *Kālī* displayed in the Government Museum, Chennai (Accession Number: 280) was recovered from the village of Senniyanviduthi in the Thanjavur district, Tamil Nādu and is dated to the 10th century CE. The goddess is seated on the *bhadrasana*, having the *Savya lalitasana* posture with her left leg bent and her right leg hanging down at ease. She is shown having four hands with the *pāśa* in her upper left hand and the powerful *triśūla* in the upper right, all of them held effortlessly by her two fingers. She displays her *kapāla* in her lower left hand and bestows her assurance to the devotee by showing the *abhaya mudrā* in her lower right hand. The goddess is depicted with an *agni-keśa*, where her hair is seen rising like a flame, in a manner of showcasing her extreme power. Her headdress is decorated by a skull entwined with two snakes along with a *dataru* flower and a crescent moon, revealing her paradoxical nature as a divine mother and the one with an uncontrollable anger. She wears a smile that comforts her devotees, but showcases her fangs just to remind them of what she is really capable of. The goddess is covered only by a lower garment completely adorned with festoons being clasped by the help of a *kaṭi-bandha* with a *simha-mukha* motif. She appallingly displays a *yagnopavita* made of human heads while her femineity is accentuated by her voluptuous breasts which are seen wrapped around by snakes. The goddess is heavily ornamented by three necklaces all big enough to rest on her shoulders along with *keyuras*, *katakas*, *pāda-śaras* and *pāda-katakas*. Even her fingers are decorated with rings exhibiting the skill of the bronze artist to carve such minute details. The most unique ornaments she possesses however are her two *kuṇḍalas* which has an owl on the left and a *preta* on the right.

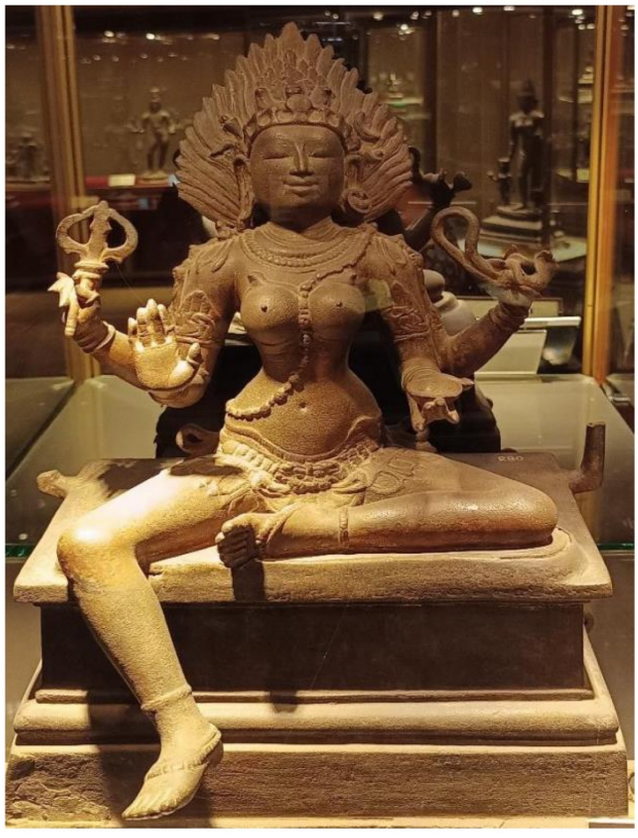

Fig. No. 01: Kālī, 10th Century, Government Museum, Chennai (Accession Number: 280)

The other image of goddess *Kālī* is displayed in the Government Museum, Chennai (Accession number 276) and is dated to the 10th century CE originating from Thiruthuraipoondi in the Tiruvarur district, Tamil Nādu. *Kālī* here is depicted standing in *samabanga* on a lotus pedestal and having four arms, holding the *ankusha* and the *triśūla* in the upper two hands and the lower left hand must have held the now missing *kapāla* while the lower right-hand strikes the *abhaya mudrā*. The goddess is adorned with a beautifully ornate *agni-keśa* with a skull, crescent moon and a snake in motion, and with her third eye on the forehead, she displays her Saivite affiliation to the world. Her body is given a graceful treatment with a lithe torso and voluptuous breasts seen with a serpent wrapped around. The *vaikākshaka* with shoulder decorations divides itself into two near the torso to have a beautifying effect and her lower garment is adorned with festoons and stretches till her ankles while being held only by a *kati-bandha* with a *simha-mukha* motif. As ornaments, she wears a necklace, *Keyuras* and *katakas* on all four hands along with *pāda-śaras* on her feet. The goddess also sports a *preta-kuṇḍala* on her right ear while having a *patra-kuṇḍala* on her left.

Fig. No. 02: Kālī, 10th century, Government Museum, Chennai (Accession Number 276)

The third image of goddess *Kālī* is currently on display in the Government Museum, Chennai (Accession Number 688/70) and was obtained from Tiruvenkadu in the Nagapattinam district, Tamil Nādu and is dated to the 11th century CE. The goddess here is depicted as sitting on the *bhadrasana* in the *savya lalitasana* posture. She has four arms and holds the *ankusha* and *triśūla* in the upper two hands which are slightly tilted while the *kapāla* and the assurance of the goddess can be seen in the lower two. Her beautifully decorated *agni-keśa* shows a crescent moon, and a skull perched atop two snakes in the middle of the raging fire. She only wears a lower garment whose pleats hangs down the centre of the pedestal. The sculptor wanting to protect the delicate feet of the goddess makes sure that her left foot rests on her hanging pleats, not knowing the rough surface of the *bhadrasana* while her right foot is allowed to rest on a platform projecting from the pedestal. As ornamentation she wears a *yagnopavita* embellished with human heads along with a bejewelled necklace, snakes binding her breasts, *keyuras*, *katakas*, and *pāda-śaras*. Her face is displayed with an enlightened smile with her fangs slightly protruding underneath while her overall ferocity is accentuated by the *preta-kuṇḍalas* she proudly displays.

Fig. No. 03: Kālī, 11th century, Government Museum, Chennai (Accession Number 668/70)

The fourth bronze image of a female goddess currently displayed in the Government Museum, Chennai (Accession Number 273), discovered from Turraikkadu in Tamil Nādu and dated to the 11th century CE is mislabelled '*Mahishasuramardini*' when it actually portrays *Kālī* as '*Nisumbasudani*' or the 'Destroyer of *Nisumba*' as correctly pointed out by Nagaswamy in the seminal work '*The Sensuous and the Sacred Chola bronzes from South India*'. *Mahishasuramardini* or *Durga* is never depicted with an *agni-keśa* and a crescent moon along with fangs near the lips or with a skull and snakes on top of her head, as these are all attributes of *Kālī* as gleaned from previous examples of the deity from the Chola period. This is a unique image in the museum among the bronze *Kālī* sculptures from the Chola period as her *prabhāvali* has survived the test of time. This eight-armed deity does strike the pose of slaying a demon with a trident that should have been present in the upper most right arm but we do not see a buffalo or a demon emerging out of the animal as is the usual portrayal in the images of *Mahishasuramardini*[71]. Here the pedestal only displays one unfortunate figure whose last image will be that of the magnificent goddess in all her glory. *Kālī* is seated comfortably in *sukhasana*, while holding the *sarpa* in *vismayamudrā*, *kheta*, *ghaṇṭā*, and *kapāla* on the four left hands and the four right hands now partially broken may have held the *triśūla*, *khaḍga*, *dhanus* and *krpana*. The goddess is surrounded by a *prabhāvali* bordered by three tongued flames and her lower garment with a *kati-bandha* and festoons has a small pleat hanging from the middle. She is adorned by a bejewelled necklace, *preta-kuṇḍala* in the right ear and *patra-kuṇḍala* with an unintelligible motif in the left, snakes around the breasts, *keyuras* and *katakas* in all the eight hands along with *pāda-katakas* and *pāda-śaras*. Even the demon below the goddess's feat is neatly chiselled with a *vaikākshaka* and *pāda-śaras* showing without doubt the excellence of Chola period art.

Fig. No. 04: Mislabelled Kālī figure, 11th century, Government Museum, Chennai (Accession Number 273)

The fifth *Kālī* sculpture currently displayed in the Government Museum, Chennai (Accession Number 275), unearthed from Turraikkadu in Thanjavur district, Tamil Nādu and dated to the 13th century CE is portrayed as standing in *samabhanga* on an inverted lotus pedestal. She also has four hands holding the *pāśa* and *ankusha* in the upper two hands while the lower left hand must have held a *kapāla*, with the lower right brandishing the *abhaya mudrā*. She has a third eye on the forehead, a raging *agni-keśa* with a grumpy looking face on top of her head which most probably

should represent a skull, while a crescent moon is shown on the left side of her head. She is adorned with a three-tiered necklace, shoulder ornaments, a snake around her breasts, a very thick *yagnopavita*, *keyuras* and *katakas* in all four arms, a *preta-kuṇḍala* on the right ear and a *patra-kuṇḍala* on the left along with *pāda-śaras*. Her lower garment which projects at the sides flows to her ankles with festoons on the top and floral designs throughout.

Fig. No. 05: Kālī, 13th Century, Government Museum, Chennai (Accession Number 275)

The sixth image of goddess *Kālī* is currently on display in the Government Museum, Chennai (Accession Number 5/99) and was recovered from the district of Tiruchirappalli, Tamil Nādu dated to the 13th century CE. She stands in *samabhanga* on an inverted lotus pedestal which is seen having three decapitated human heads at the bottom. Her *mukuta* looks as if it is trying to control her flaming hair that seems to be coming out from the sides while the goddess also sports a third eye on the forehead and a pair of *kuṇḍalas* to decorate her ears. Her four hands hold the *triśūla* and *ḍamaru* on the upper two while the lower two holds the *kapāla* and *khaḍga*. She wears a *kuca-bandha* and a lower garment that is stretched till the ankles with pleats protruding from the sides. As ornaments, she wears two necklaces, one near her neck with a pendant and the other big enough to fall on her shoulders along with *keyuras* and *katakas*.

Fig. No. 06: Kālī, 13th Century, Government Museum, Chennai (Accession Number 5/99)

The seventh image of goddess *Kālī* currently displayed in the Government Museum, Chennai (Accession Number 45) was obtained from the Pudukottai District, Tamil Nādu and is dated to the 13th century CE. She is seen sitting in the *savya lalitasana* posture on an inverted lotus pedestal while having four arms holding the *pāśa* and *ḍamaru* (damaged) in the upper two hands and the *kapāla* and *triśūla* in the lower two. Her hair in the form of an *agni-keśa* seems to emulate a raging fire and a face can also be seen in the middle; her forehead is decorated with festoon like designs and two datura flowers are seen on top of her ears. She wears a very thin *kuca-bandha* trying to retain her voluptuous breasts and her lower garment has a girdle with pleats on the sides along with circular floral motifs throughout. Her ornaments include *patra-kuṇḍalas*, shoulder tassels, *katakas*, *keyuras*, *pāda-katakas* and *pāda-śaras*.

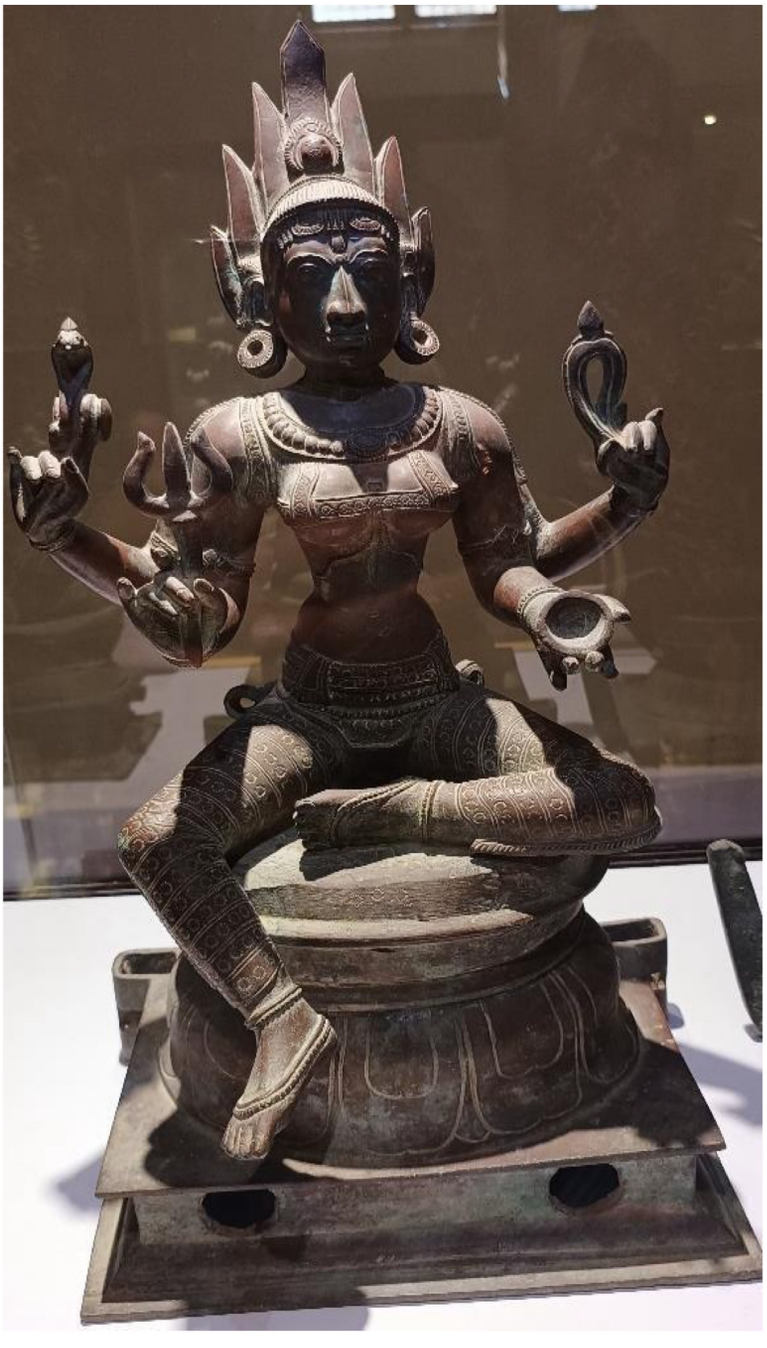

Fig. No. 07: Kālī, 13th century, Government Museum, Chennai (Accession Number 45)

Fig. No. 08: Backside View of Figure 7

Comparative Analysis of the Bronze Sculptures: All the Chola bronze sculptures of *Kālī* regardless of date had holes and loops on their pedestals indicating that they must have all been used for processions, proving the fact that all of these images might have belonged to temples at one particular point of time in the past. Figure 1 can definitely be dated to the 10th century due to a faded early Tamil inscription found engraved in the pedestal. So, this sculpture can be used as a base to see the evolution of style among the *Kālī* bronze images of the Chola period. All the images of *Kālī* in this study had raised eyebrows and completely opened eyes regardless of the time period. It is clear all through that her idea of being a ferocious goddess never changed. All the sculptures except Figure 3 (whose *prabhāvali* survived) show evidence in the form of broken

projections on both sides of the pedestal to indicate that they might have sported a *prabhāvali* surrounding the deity. The pointed ends of the *triśūla* held by the goddess in the images dated from the 10th to the 11th century are fused but this style cannot be seen in the same weaponry that is found in later dated sculptures. The sculptures of Figure 5 are similar in style to Figure 2 even though they are dated to be two centuries apart from each other. Figures 6 & 7 are seen with a *kuca-bandha* which is previously unknown in the images of *Kālī* and their weapons are always raised high which also was not a consistent trend in the past. Though Figures 5, 6 & 7 have the goddess placed on an inverted lotus, they are not similar as Figures 6 & 7 show their body treatment to be more rigid than in the previously dated images. This might prove the fact that there might be a transitional phase within later Chola art as suggested by Nagaswamy[72], with Figure 5 belonging to the earlier phase and Figures 6 & 7 belonging to the later phase. Another point to support this statement can be seen in the *Kālī* images dated before the later parts of the 13th century CE to be portrayed with voluptuous breasts coiled by a snake, which cannot be seen in Figures 6 & 7. Also, the icon of a *ḍamaru* entwined by a *sarpa* can only be seen in images dated to the later parts of the 13th century and not before that. Figures 5, 6 & 7 showcase a broader torso compared to the ones seen in Figures 1 to 4 which have more leaner torsos. The images from the 10th Century to the early stages of the 13th century exhibits the beautiful *agni-keśa* sported by the goddess but this motif is replaced by a *mukuta* with some flaming hairs in the back as seen in Figure 6. Though Figure 7 sports an *agni-keśa*, it is dull in comparison to the older images. The 13th century images also have a protruding nose and short necks in comparison to earlier dated images. The *yagnopavita* worn by the goddess seems to have disappeared from the time of making Figures 6 & 7, as she may have become a Tantric goddess more than a Brahmanical one, even though the ghastly sight of a *yagnopavita* made of decapitated heads and *preta-kuṇḍalas* can only be seen in the earlier images. Figure 7 has a circular wheel-like design behind the head (Figure 8) whose utility was mainly to support the heavy flower garlands offered for the goddess during processions without toppling the image itself[73]. This feature can be seen only from images from the 13th century and never before that. Thus, by comparing all the images considered for the study, stylistically and visually one can agree with certain arguments put forward by Sivaramamurti, Nagaswamy and Thomas regarding the dating of Chola Bronze Sculptures.

But one must also reconsider using only stylistic analyses for dating Chola bronzes, as advances in technology have improved the methods that can be used to analyse the metals themselves as shown by Marzenna Czerniak-Drożdżowicz & Anna A. Ślączka, 2016 and by Sharada Srinivasan, 2016 who had performed metallurgic analyses to find out the metals composition used in the images themselves and dated the sculptures according to the metal content. Srinivasan classifies the Chola bronzes as Early Vijayalaya Chola (c. 850–940 CE), Later Vijayalaya Chola (c. 940–1070 CE), Early Chalukya-Chola (c. 1070–1125 CE) and Later Chalukya-Chola (c. 1125–1279 CE) depending on the consistency of each element present in the sculptures found using Lead Isotope and Trace Element Data[74]. Techniques such as these should be used in

the future for correctly understanding whether the already given dates of sculptures using stylistic analyses match with their metallurgical analyses.

Conclusion: The Chola Empire left a legacy for posterity in the field of ideas, arts and in the institutions that affect the lives of the people. Their bronze sculptures, worshipped as living entities became integral to numerous festivities and rituals both in the temple and around its environs. This artistic tradition of creating figurative sculptures with its 'timeless quality' remained unparalleled through centuries and across different cultures. The promotion of *Āgamic* Saivism, the temple constructions which still dot many areas in and around Tamil Nādu[75], and of Bharatanatyam having hand postures and body flexions imitated the art of bronze castings. All these endeavours can be used by scholars from every field to see the historical presence of the Cholas. With this study, indicates that the earlier icons, produced between the 9th and 12th centuries CE, have very high aesthetic and technological qualities, which can be labelled as 'the best bronzes on the Indian subcontinent'[76]. Further extension of the study of Chola bronze sculptures as presented in this paper is always possible, as in the past, every time a new bronze icon was supposed to be made, a new wax model of the image was required to be prepared from scratch and each image traditionally came to be made with different proportional systems depending on the physical body of the patron or a number derived from the patron's astrological chart and numerological systems, taken in conjunction with values derived from the deity[77].

References:

1. Thomas, Job I., *Chola Bronzes*, (Chennai, 2018)
2. Sivaramamurti, C, *Indian Bronzes*, (Bombay, 1962).
3. Osborne, Harold, *The Art of Appreciation*, (New York, 1970).
4. Gravely, F.H., and Ramachandran, T.N., *Catalogue of the South Indian Hindu Metal images in the Madras Government Museum*, (Chennai, 2002).
5. Venkataraman, B, *Rajarajesvaram the Pinnacle of Chola Art*, (Madras, 1985).
6. Thomas, Job I., *Chola Bronzes*, (Chennai, 2018).
7. Sridhar, T.S., Vasanthi, S, and Balasubramanian, R, *An Exhibition on Chola Bronzes 1000th Anniversary of Thanjavur Big Temple Celebration*, (Chennai, 2011).
8. Dehejia, Vidya, *The Sensuous and the Sacred Chola Bronzes from South India*, (New York, 2002).
9. Lippe, Aschwin, "Divine Images in Stone and Bronze: South India, Chola Dynasty (c. 850-1280)", *Metropolitan Museum Journal, Vol. 4* (1971), pp. 29-79.
10. Thomas, Job I., *Chola Bronzes*, (Chennai, 2018).
11. Nagaswamy, R, *Master Pieces of Early South Indian Bronzes*, (New Delhi, 1983).
12. Dehejia, Vidya, *The Sensuous and the Sacred Chola Bronzes from South India*, (New York, 2002).
13. Thomas, Job I., *Chola Bronzes*, (Chennai, 2018).
14. Thomas, Job, *Tiruvengadu Bronzes*, (Madras, 1986).
15. Sastri, Nilakanta K.A., *A History of South India from Prehistoric Times to the Fall of Vijayanagar*, (London, 1997).
16. Singh, Upinder, *A History of Ancient and Early Medieval India*, (Noida, 2009).
17. Venkataraman, B, *Rajarajesvaram the Pinnacle of Chola Art*, (Madras, 1985).
18. Karashima, Noburu, *Ancient to Medieval: South Indian Society in Transition*, (London, 2009).
19. Thomas, Job I., *Chola Bronzes*, (Chennai, 2018).
20. Sivaramamurti, C, *Indian Bronzes*, (Bombay, 1962).
21. Thomas, Job I., *Chola Bronzes*, (Chennai, 2018).

22. *Ibid*.
23. Sastri, Nilakanta K.A., *A History of South India from Prehistoric Times to the Fall of Vijayanagar*, (London, 1997).
24. Singh, Upinder, *A History of Ancient and Early Medieval India*, (Noida, 2009).
25. Thomas, Job I., *Chola Bronzes*, (Chennai, 2018).
26. Singh, Upinder, *A History of Ancient and Early Medieval India*, (Noida, 2009).
27. Sastri, Nilakanta K.A., *A History of South India from Prehistoric Times to the Fall of Vijayanagar*, (London, 1997).
28. Dehejia, Vidya, *The Sensuous and the Sacred Chola Bronzes from South India*, (New York, 2002).
29. Srinivasan, Sharada, "Tamil Chola Bronzes and Swamimalai Legacy: Metal Sources and Archaeotechnology", *Journal of Metals 68(8)* pp. 2207-221.
30. Dehejia, Vidya, *The Sensuous and the Sacred Chola Bronzes from South India*, (New York, 2002).
31. *Ibid*.
32. Thomas, Job I., *Chola Bronzes*, (Chennai, 2018).
33. Nagaswamy, R, *Master Pieces of Early South Indian Bronzes*, (New Delhi, 1983).
34. Dehejia, Vidya, *The Sensuous and the Sacred Chola Bronzes from South India*, (New York, 2002).
35. Thapar, D.R., *Icons in Bronze an Introduction to Indian Metal Images*, (Bombay, 1961).
36. Dehejia, Vidya, *The Sensuous and the Sacred Chola Bronzes from South India*, (New York, 2002).
37. Sivaramamurti, C, *Indian Bronzes*, (Bombay, 1962).
38. *Ibid*.
39. Thomas, Job I., *Chola Bronzes*, (Chennai, 2018).
40. *Ibid*.
41. Nagaswamy, R, *Master Pieces of Early South Indian Bronzes*, (New Delhi, 1983).
42. Thomas, Job, *Tiruvengadu Bronzes*, (Madras, 1986).
43. Desikan, Srinivasa V.N., *Guide to the Bronze Gallery*, (Chennai, 1998).
44. Thomas, Job I., *Chola Bronzes*, (Chennai, 2018).
45. *Ibid*.
46. *Ibid*.
47. Sivaram, Rama S., (1989) *Origin and Emergence of Style in Early Chola Art*, Unpublished PhD Thesis, M.S. University Baroda.
48. Desikan, Srinivasa V.N., *Guide to the Bronze Gallery*, (Chennai, 1998).
49. Srinivasan, Sharada, "Tamil Chola Bronzes and Swamimalai Legacy: Metal Sources and Archaeotechnology", *Journal of Metals 68(8)* pp. 2207-221.
50. *Ibid*.
51. Kalidos, Raju, *Encyclopaedia of Hindu Iconography Early Medieval Vol. III Sakti Goddesses*, (Delhi, 2006).
52. Das, H.C., *Iconography of Sakta Divinities Volume I*, (Delhi, 1997).
53. Rao, Ramachandra S.K., *Encyclopaedia of Indian Iconography Hindus-Buddhism-Jainism*, (Delhi, 2003).
54. *Ibid*.
55. Das, H.C., *Iconography of Sakta Divinities Volume I*, (Delhi, 1997).
56. Thomas, Job I., *Chola Bronzes*, (Chennai, 2018).
57. Thomas, Job, *Tiruvengadu Bronzes*, (Madras, 1986).
58. Thomas, Job I., *Chola Bronzes*, (Chennai, 2018).
59. Nagaswamy, R, *Tantric Cult of South India*, (Delhi, 1982).
60. Dehejia, Vidya, *The Sensuous and the Sacred Chola Bronzes from South India*, (New York, 2002).
61. Nagaswamy, R, *Tantric Cult of South India*, (Delhi, 1982).
62. *Ibid*.
63. *Ibid*.
64. Thomas, Job I., *Chola Bronzes*, (Chennai, 2018).
65. Raman, M, *Select Bronzes in the Chennai Museum a Descriptive Catalogue*, (Chennai, 1998).
66. Sivaramamurti, C, *Indian Bronzes*, (Bombay, 1962).

67. Nagaswamy, R, *Master Pieces of Early South Indian Bronzes*, (New Delhi, 1983).
68. *Ibid*.
69. Dehejia, Vidya, *The Sensuous and the Sacred Chola Bronzes from South India*, (New York, 2002).
70. Thomas, Job, *Tiruvengadu Bronzes*, (Madras, 1986).
71. Rao, Ramachandra S.K., *Encyclopaedia of Indian Iconography Hindus-Buddhism-Jainism*, (Delhi, 2003).
72. Dehejia, Vidya, *The Sensuous and the Sacred Chola Bronzes from South India*, (New York, 2002).
73. Gravely, F.H., and Ramachandran, T.N., *Catalogue of the South Indian Hindu Metal images in the Madras Government Museum*, (Chennai, 2002).
74. Srinivasan, Sharada, "Tamil Chola Bronzes and Swamimalai Legacy: Metal Sources and Archaeotechnology", *Journal of Metals 68(8)* pp. 2207-221.
75. Thomas, Job I., *Chola Bronzes*, (Chennai, 2018).
76. Czerniak-Drożdżowicz, Marzenna, and Ślączka, Anna A., "Cola Bronzes in the Context of the History and Culture of Tamil Nadu", *Art of the Orient, Vol.5* (2016), pp. 109-146.
77. Dehejia, Vidya, *The Sensuous and the Sacred Chola Bronzes from South India*, (New York, 2002).

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